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ATTY DOCKET NO. 1190-0479P APPLICATION NO. 09/730,755

APPLICANT

KAGAWA et al.

FILING DATE

December 7, 2000

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## U.S. PATENT DOCUMENTS

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(L)	US 5,659,406	B1	1997-08-19	Imao et al.		Technolog	ly Center 2600	
7	US 6,434,268	B1	2002-08-13	Asamura et al.			2000	
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## FOREIGN PATENT DOCUMENTS

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